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Massachusetts Lobster Fishery Statistics

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MASSACHUSETTS
DIVISION OF MARINE FISHERIES

1981
Massachusetts Lobster Fishery Statistics

by
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Department of Fisheries, Wildlife and Recreational Vehicles
Division of Marine Fisheries

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INTRODUCTION

The commercial lobster fishery of Massachusetts is the most economically important fishery conducted within the territorial waters of the Commonwealth. The overal economic importance of the fishery both in New England and, in recent years, the Mid-Atlantic states, has focused the attention of Federal, Regional and State fishery managers on this species. Initially, in an attempt to standardize management of the fishery, the Federal and State Governments developed an overall lobster fishery management plan under the auspices of the State-Federal Partnership Program. However, with the passage of the Fisheries Management and Conservation Act, the New England Fisheries Management Council, in cooperation with the Mid-Atlantic Council has developed a management plan for the entire east coast lobster fishery. The plan is in the final stages of implementation. The basis of any such plan and for monitoring the success of the plan is an accurate statistical data base. The Commonwealth of Massachusetts, with joint funding from the National Marine Fisheries Service, has been collecting annual reports from licensed lobster fishermen for many years. Historically, the data collected was used primarily for descriptive and informational purposes, and occasionally for management. However, with the recent emphasis on Federal management, this data takes on added importance in terms of providing the respective management agencies with adequate information to ensure that the interests of Massachusetts' lobstermen are protected.

Until 1981, the number of coastal commercial lobster licenses issued by the Division was limited, by law, to 1300. There was a provision for the issuance of 130 additional licenses if the applicant could satisfactorily prove to the Massachusetts Marine Fisheries Advisory Commission that they would suffer significant economic hardship if they did not obtain a commercial lobster permit. In 1981, an additional 100 licenses became available for issuance. In 1982, and in subsequent years, an additional 80 licenses per year will be available. Licenses which are not renewed are retired.

This report is the fifteenth annual publication of data summarized from catch reports submitted by licensed lobster fishermen. Data was presented in a standardized format through 1979. For the 1980 report, data presentation was changed to reflect a more thorough collection and evaluation of the data. The new presentation format is continued in this report. It is anticipated that this format will continue until such time as the Division implements computer processing of the data.

This report has been prepared by personnel from the Division of Marine Fisheries Commercial Fisheries Statistics Project, funded jointly by the Commonwealth and the National Marine Fisheries Service under the Commercial Fisheries Research and Development Act (Public Law 88-309). The preparation of this report would not have been possible without the cooperation of the licensed lobstermen who provided the data on their annual reports. Special thanks also go to Nancy Leamy and Mary Ann Gachignard for their assistance in preliminary processing of the catch reports when they are received from the fishermen.

SOURCE OF DATA

No person may fish for or take lobsters in coastal waters or land lobsters in the Commonwealth without a permit issued by the Director of the Division of Marine Fisheries (Chapter 130, Mass. G.L., Section 38). Chapter 130, Mass G.L. Section 23, requires any person so licensed to file an annual report of their catch by January 31 for the preceding calendar year. In 1980, a dual reporting system was established. Commercial lobstermen (coastal, offshore and seasonal) receive a detailed catch report form with their license renewal application. This report requests the following information: method of fishing; number and type of gear used; effort data (set-over day, average number of trips per month, etc.); pounds of lobster taken; areas fished; principal ports of landing; and information relative to the vessels used in the fishery. Recreational fishermen are asked to report only the number of lobsters taken the previous year on their license renewal application form.

Project personnel sort, edit, tabulate and interpret data from all reports received. Data presented in this booklet are based on catch reports actually received and are not expanded to 100 percent levels.

EXPLANATION OF TABLES

All data presented in this booklet are broken down into two basic categories: the first is "Inshore" which represents all data pertaining to all lobster activity taking place within 69° West Longitude and 41° North Latitude; the "offshore" category refers to all data outside of the given coordinates.

Tables presenting number of fishermen by license type, number of pots fished, number and value of boats used in the fishery and total landings statewide, by county and for each city and town were prepared using the catch reports submitted by all commercial fishermen. In keeping with Division policy, some of the data is masked or combined to protect the confidentiality of the individual submitting the report. Data referring to the number of fishermen, number and value of gear, and number and value of boats are presented by the home port of the licensee filing the report. Pounds of lobsters harvested are presented by the port of landing reported by the fishermen.

Due to limited data storage capacity of the programmable calculator used to calculate percent of catch by area and month fished and catch per unit of effort, only those reports submitted by holders of commercial coastal licenses could be tabulated.

Where tabular material refers to county, the reader is referred to Figure 1. Fishing areas are delineated in Figure 2.

Vessel and SCUBA gear values were calculated on the basis of the fishermen's estimate of its present value and the percentage of its use specifically for lobstering. Average values were used when the information was omitted from an individual report.

When fishermen reported the number of lobsters taken, rather than poundage, a conversion factor of 1.2 pounds per lobster was used to calculate poundage figures. This factor is based on historical data.

1981 HIGHLIGHTS

1) There were 16,020 lobster licenses of all types issued during 1981: 1,515 coastal commercial; 387 seasonal commercial; 603 offshore and 13,515 non-commercial.

2) A total of 5,281 licensed lobstermen (33 percent) failed to file a catch report with the Division. Of the 10,739 fishermen reporting, 2,713 (25 percent) reported that they did not fish for lobster during 1981.

3) A total of 11,289,598 pounds of lobsters were reported landed. Of these, recreational fishermen reported taking 395,829 pounds, while the commercial fishermen reported taking 10,893,769 pounds. Based on a value of $2.09 per pound,[1] the commercial catch was valued at $23,595,260.

4) Commercial fishermen comprised 19 percent of the total number of fishermen reporting and landed 97 percent of the total catch.

5) Non-commercial SCUBA divers represented 30 percent of the fishermen reporting, but landed only 0.8 percent of the total poundage.

6) In total pounds of lobsters landed Essex County ranked first, Plymouth County second and Barnstable County third.

7) In total numbers of commercial fishermen, Essex County ranked first with 637, Plymouth County second with 395 and Barnstable County third with 170.

8) In the commercial fishery, pots were valued at $10,104,835,[2] diving gear at $32,981, and power and non-power boats at $23,612,694, yielding a total gear value of $33,750,510. Combined with the value of lobsters sold, $23,595,260, gives a total fishery value of $57,346,130.

9) Of the 10,893,769 pounds of lobsters landed commercially, 9,408,261 were reported taken inside of 69°W and 41°N and of that number, 8,532,735 pounds were estimated to have been taken within the territorial waters of the Commonwealth.

10) More lobsters were landed in Boston, 1,008,984 pounds, than in any other Massachusetts port. Gloucester ranked second with 828,250 pounds followed by Plymouth with 811,501 pounds.

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[1] Ex-vessel price determined by weighted averages of prices listed in the National Marine Fisheries Service "Blue Sheet".

[2] Based on an average value of $32.50 per pot, including warp and buoys.

11) Landings by coastal commercial fishermen rose steadily in the spring, peaked in August and then declined. The least amount of lobsters were landed in January and February.

12) According to coastal fishermen, the greatest numbers of lobsters taken inside 69°W and 41°N were from Boston Harbor (Area 4) followed by Cape Ann (Area 2) and the Beverly-Salem-Marblehead (Area 3).

13) The average catch per trap haul for coastal fishermen was 0.571 pounds. For traps fished for one set-over-day the average was 0.488; for those fished two days 0.543; and for three set-over-days 0.664. These numbers are an increase over 1980 when the average catch per trap haul was 0.533. Average 1980 catch per trap haul was 0.402 for one set-over-day, 0.529 pounds for two days and 0.616 pounds for three set-over-days.

Table I

Reporting Status of 1981 Lobster Licensees

Licenses Issued

Coastal Commercial ($100)	1,515
Seasonal Commercial ($25)	387
Offshore ($100)	603
Non-Commercial ($15)	13,515
Total	16,020

Reporting Status

Type	Not Reporting	Reported "Not Fishing"	Reported "Fishing"
astal Commercial	63 (4%)	197 (13%)	1,255 (83%)
asonal Commercial	197 (51%)	22 (6%)	168 (43%)
fshore	200 (33%)	281 (47%)	122 (20%)
n-Commercial	4,821 (36%)	2,213 (16%)	6,481 (48%)

TABLE 2

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

STATEWIDE TOTALS

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver 5	7,504		4	18,060	1	50	9,665
	Potman 1,223		285,186	1,222	19,109,669	85	26,559	8,951,204
	Both 25	25,477	5,074	26	311,190	6	1,270	177,001
SEASONAL	Potman 168		3,210	157	317,872	7	1,910	48,349
OFFSHORE	Trawl 68			68	818,858			116,321
	Potman 24		5,898	24	393,731			105,141
TOTAL[1]	1,515	32,981	299,368	1,503	21,054,380	99	29,789	9,408,261
Taken Outside 69°W 41°N								
OFFSHORE	Trawl 20			20	726,650			134,716
	Potman 10		11,550	10	1,801,875			995,815
COASTAL	Potman							354,977
TOTAL	30		11,550	30	2,528,525			1,485,508
GRAND TOTAL	1,545	32,981	310,918	1,533	23,582,905	99	29,789	10,893,769

[1] includes some masked data to protect confidentiality

TABLE 3

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

BARNSTABLE COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver 3	3,304	0	2	4,110		0	7,900
	Potman 120	0	25,121	114	1,546,096	8	6,240	630,967
	Both 7	7,789	772	7	39,190	4	790	24,532
SEASONAL	Potman 12		197	10	29,630	1	50	2,633
OFFSHORE	Trawl 21			21	202,978			16,128
	Potman 4		4,176	4	193,400			76,364
TOTAL*	169	11,093	30,266	160	2,100,404	13	7,080	759,104
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							2,500
	Potman							438,042
COASTAL	Potman							201,106
TOTAL								641,648
GRAND TOTAL*	170		31,366	161	2,300,404	13	7,080	1,400,752

*Data masked to protect confidentiality

TABLE 4

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

BRISTOL COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER		DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N									
COASTAL	Diver	0							
	Potman	71		15,832	73	1,940,558	2	60	291,948
	Both	0							
SEASONAL	Potman	9		199	9	9,317			1,549
OFFSHORE	* Trawl	3		350	3	32,000			7,535
	Potman								
TOTAL		83		16,381	85	1,981,875	2	60	301,032
Taken Outside 69°W 41°N									
OFFSHORE	Trawl								
	* Potman	7		4,400	7	1,379,000			365,454
COASTAL	Potman								141,045
TOTAL		7		4,400	7	1,379,000			506,499
GRAND TOTAL		90		20,781	92	3,360,875	2	60	807,531

*Data masked to protect confidentiality

TABLE 5

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

DUKES COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	Potman	24	3,185	26	308,825			72,571
	Both							
SEASONAL	Potman	3	65	3	12,400			569
OFFSHORE	Trawl							
	Potman							
TOTAL *		28	3,292	30	323,225			73,475
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							
TOTAL								
GRAND TOTAL		28	3,292	30	323,225			73,475

*Data masked to protect confidentiality

TABLE 6

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

ESSEX COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver 0							
	Potman 519		120,341	517	7,771,878	38	9,882	3,920,544
	Both 6	3,582	1,162	6	35,650	1	100	20,767
SEASONAL	Potman 62		1,188	59	117,527	2	400	19,329
OFFSHORE	Trawl 30			30	444,660			73,930
	Potman 6		340	6	104,260			3,925
TOTAL	623	3,582	123,031	618	8,473,975	41	10,382	4,038,495
Taken Outside 69°W 41°N								
OFFSHORE	* Trawl 14		200	14	223,075			86,264
	Potman							
COASTAL	Potman							
TOTAL	14		200	14	223,075			86,264
GRAND TOTAL	637	3,582	123,231	632	8,697,050	41	10,382	4,124,759

*Data masked to protect confidentiality

TABLE 7

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

MIDDLESEX COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	Potman	3	230	3	6,925			4,362
	Both							
SEASONAL	Potman							
OFFSHORE	Trawl							
	Potman							
TOTAL		3	230	3	6,925			4,362
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							
TOTAL								
GRAND TOTAL		3	230	3	6,925			4,362

TABLE 8

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

NANTUCKET COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
*	Potman	5	16	728	5	41,200		18,653
	Both							
SEASONAL	* Potman							
OFFSHORE	Trawl							158
	Potman	3		40	3	4,725		1,286
TOTAL		8	16	768	8	45,925		23,097
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							12,826
TOTAL								13,018
GRAND TOTAL *		9	16	768	9	48,925		36,115

TABLE 9

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

NORFOLK COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	Potman	75	16,560	75	1,468,970	7	2,975	701,230
	Both	3	1,365	315	3	20,350	1	380	11,440
SEASONAL	Potman	5	66	5	5,050	1	10	486
OFFSHORE	Trawl							
	Potman							
TOTAL	*	85	3,665	16,941	85	1,508,883	9	3,365	714,278
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							
TOTAL								
GRAND TOTAL		85	3,665	16,941	85	1,508,883	9	3,365	714,278

*Data masked to protect confidentiality

TABLE 10

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

PLYMOUTH COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	Potman	304	69,370	310	4,310,165	25	5,907	2,208,862
	* Both	8	13,625	1,925	9	201,750	1	50	85,882
SEASONAL	Potman	61	1,193	57	124,268	2	1,300	18,442
OFFSHORE	Trawl	12		12	75,132			23,426
	Potman	9	715	9	44,271			11,965
TOTAL		394	13,625	73,203	397	4,755,586	28	7,257	2,348,577
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							
TOTAL								
GRAND TOTAL	*	395	13,625	73,253	398	4,757,461	28	7,257	2,348,971

*Data masked to protect confidentiality

TABLE II

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

SUFFOLK COUNTY

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	* Potman	101	1,000	34,339	98	1,711,752	5	1,495	1,119,842
	Both							
SEASONAL	Potman	12		240	11	15,930	1	150	4,544
OFFSHORE	Trawl							
	* Potman	4		255	4	105,375			6,746
TOTAL		117	1,000	34,834	113	1,833,057	6	1,645	1,131,032
Taken Outside 69°W 41°N								
OFFSHORE	Trawl							
	Potman							
COASTAL	Potman							
TOTAL	*	3		5,800	3	681,075			42,634
GRAND TOTAL		119	1,000	40,634	116	2,514,132	6	1,645	1,173,666

*Data masked to protect confidentiality

TABLE 12

1981 MASSACHUSETTS LOBSTER FISHERY
SUMMARY STATISTICS--COMMERCIAL

OUT OF STATE

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON-POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL	Diver							
	Potman	3	380	3	22,500			14,348
	Both							
SEASONAL	Potman							
OFFSHORE	Trawl							
	Potman							
TOTAL		5	422	4	24,525			14,809
Taken Outside 69°W 41°N								
OFFSHORE	Trawl	3		3	40,500			44,064
	Potman							150,987
COASTAL	Potman							
TOTAL		3		3	40,500			195,051
GRAND TOTAL		8	422	7	65,025			209,860

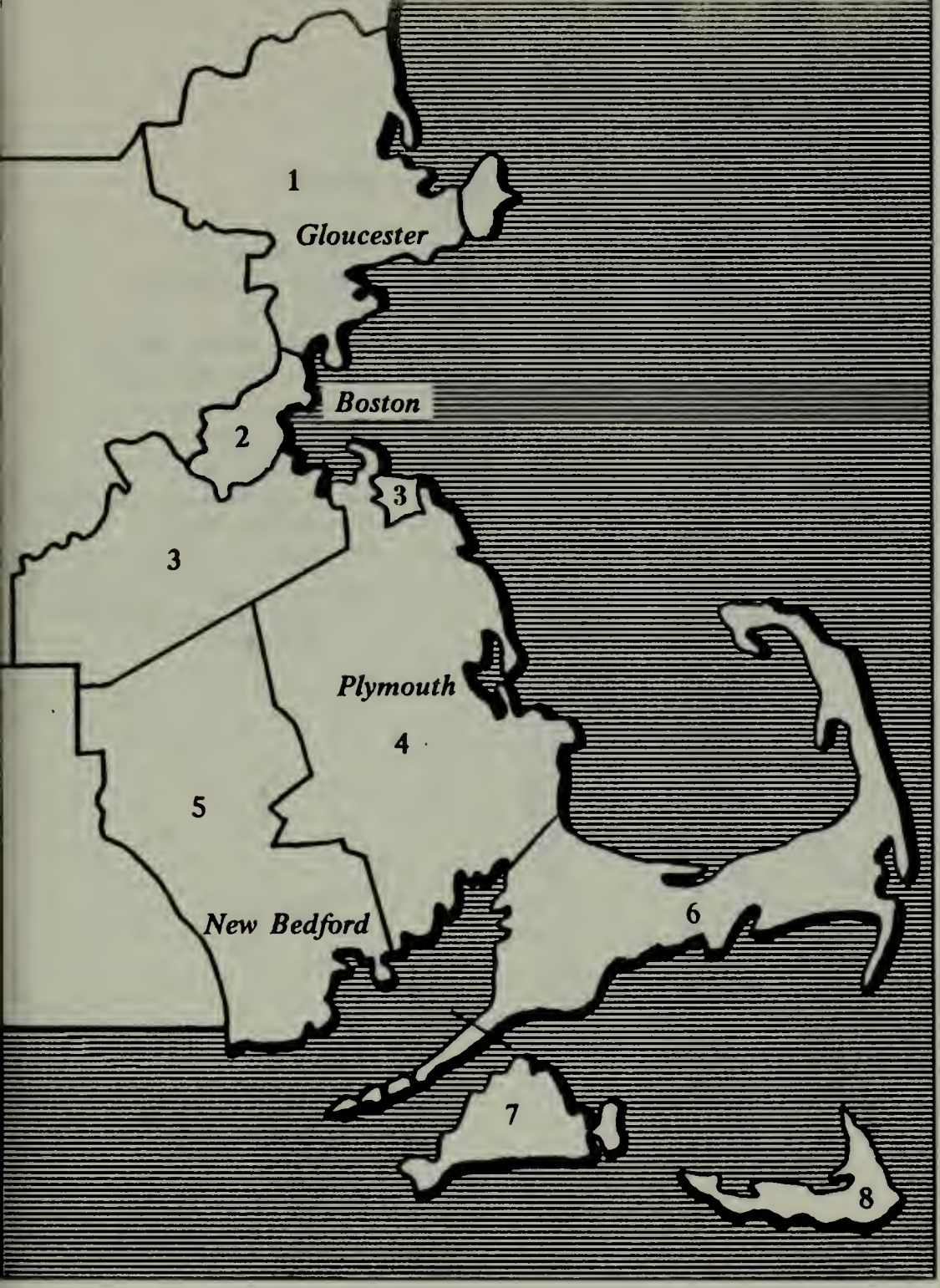
*Data masked to protect confidentiality

Table 13. Pounds of lobster landed by commercial fishermen by city or town of landing in 1981.

City/Town	Inside 69°W 41°N	Outside 69°W 41°N	Total
Barnstable	31,420	261,769	293,189
Beverly	530,592		530,592
Boston-Cambridge	966,350	42,634	1,008,984
Bourne	45,745		45,745
Chatham	134,621	189	134,810
Chilmark	60,820		60,820
Cohasset	549,446		549,446
Danvers	27,328	2,062	29,390
Dartmouth	2,537		2,537
Dennis	33,361		33,361
Duxbury	28,251		28,251
Eastham	26,500		26,500
Essex	74,918		74,918
Fairhaven	76,829	10,644	87,473
Falmouth	19,121		19,121
Gloucester	744,048	84,202	828,250
Gosnold	1,212		1,212
Harwich-Brewster	99,392	195,784	295,176
Hingham	170,816		170,816
Hull	189,522		189,522
Ipswich	75,719		75,719
Kingston	29,612		29,612
Lynn	35,617		35,617
Manchester	229,845		229,845
Marblehead	624,436		624,436
Marshfield	613,015		613,015
Mattapoisett	24,803		24,803
Nahant	251,221		251,221
Nantucket	22,761	13,018	35,779
New Bedford	88,003	1,980	89,983
Newbury-Newburyport	47,627		47,627
Oak Bluffs-Tisbury	10,874		10,874
Orleans	49,476		49,476
Plymouth	811,501		811,501
Provincetown	112,210	2,500	114,710
Quincy	29,140		29,140
Revere-Medford	14,730		14,730
Rockport	466,124		466,124
Salem	66,808		66,808
Salisbury	4,609		4,609
Sandwich	196,629	181,405	378,035
Saugus	509,844		509,844
Scituate	438,476	394	438,870
Swampscott	330,430		330,430
Wareham	24,139		24,139
Wellfleet-Truro	7.996		7,996
Westport-Somerset	132,114	493,875	625,989
Weymouth	135,206		135,206
Winthrop	149,770		149,770
Out-of-State	14,348	195,051	209,399

Table 14. Massachusetts commercial lobster landings inside 69°W and 41°N by month and area as reported by coastal commercial fishermen in 1981.

Month	Percent	Area	Percent
January	0.3	1	2.3
February	0.1	2	15.9
March	0.4	3	15.1
April	2.3	4	28.0
May	6.2	5	14.7
June	6.7	6	8.5
July	19.9	7	1.9
August	23.1	8	4.9
September	17.7	9	0.4
October	13.5	10	3.5
November	7.0	11	1.6
December	2.8	12	3.2
	100.0		100.0

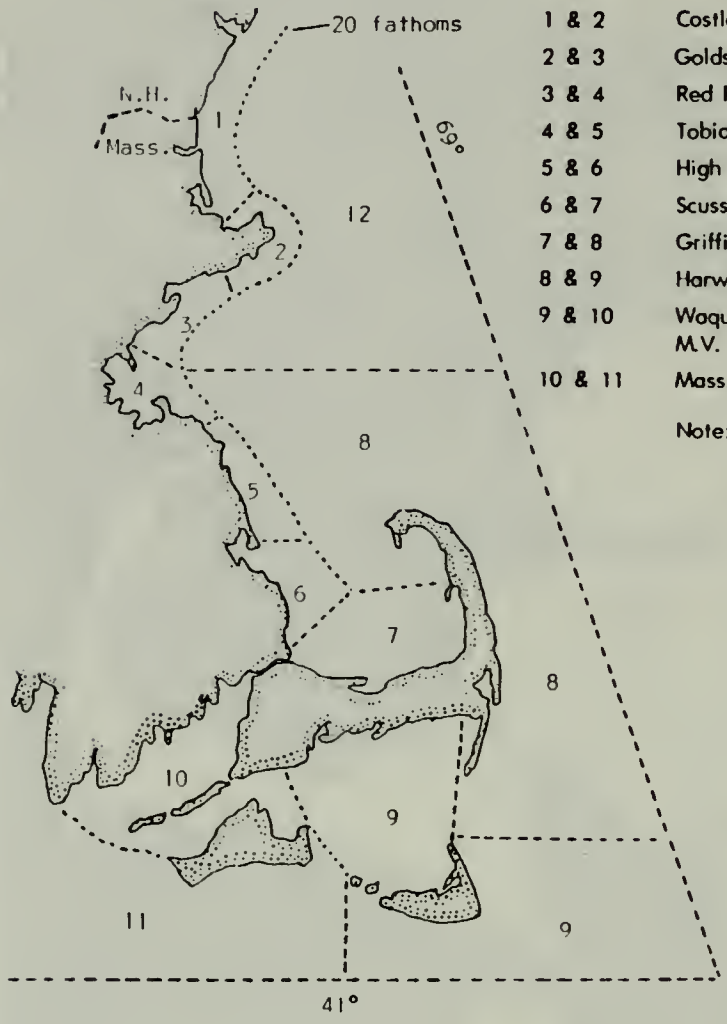


COASTAL MAP of MASSACHUSETTS
SHOWING STATISTICAL REPORTING AREAS (Counties)

1. Essex	3. Norfolk	5. Bristol	7. Dukes
2. Suffolk	4. Plymouth	6. Barnstable	8. Nantucket

Figure 1

Figure 2. Location and description of coastal lobster fishing areas in Massachusetts.



Between Areas	BOUNDARIES
1 & 2	Castle Neck, Ipswich
2 & 3	Goldsmith Point, Manchester
3 & 4	Red Rock, Lynn
4 & 5	Tobios Ledge (Spindle), Scituate
5 & 6	High Pines Ledge, Plymouth
6 & 7	Scussett Beach, Sandwich
7 & 8	Griffin Island, Wellfleet
8 & 9	Harwich/Chathom Line
9 & 10	Waquoit Bay, Falmouth - Cape Poge, M.V. - Muskeget Island
10 & 11	Mass./R.I. Line - Gay Head

Note: The seaward boundary of Areas 1 through 7 is the 20 Fathom line.